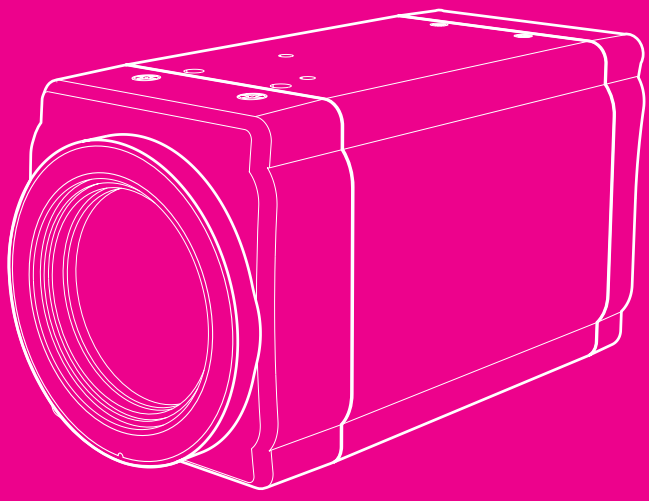
D-max
DONGYANG UNITECH

AUTO FOCUS, DAY&NIGHT

ZOOM COLOR CAMERA

USER MANUAL

DAZ-530/DAZ-523



Contents

1. Precautions **2**

2. Features **3**

3. Products Components **5**

4. Name and Functions of Each Parts **6**

1) Front 6

2) Back 7

5. Connection **9**

1) Connecting to Monitor 9

2) Connecting to Connection 9

6. Operating Your Camera **12**

1) Menu Configuration 12

2) Menu Setup 12

7. Trouble Shooting **35**

8. Specifications **36**

1. Precautions

Cautions

This information is provided to ensure your safety and to prevent any loss, financial, Please read it carefully and use the products accordingly.

● Warning

⚠	Installation of this product by unqualified personnel is strictly prohibited, Please consult an experienced installer or authorized retailer for proper installation to avoid possible fire or electric shock.
⚠	If the camera overheats or smoke is noticed, turn off immediately. It may cause fire
⚠	Do not install the product in an area of high humidity or near flammable materials (e.g oil or gas) Install the product in an incorrect environment may cause fire, electric shock damage to the product
⚠	Do not install correct installation place, to prevent possible fall to product.
⚠	Do not handle power plug with wet hand, it might cause electric shock.
⚠ ⚠	Do not insert foreign objects into the product or disassemble the products. It may cause ire or damage the product.

● Cautions

⊘	Use only under temperature condition (+50℃~-10℃).
⊘	Severe light changes or flickering may hinder normal camera operation.
⊘	Fall or strong shock, it may cause malfunction.
⊘	Do not exposure direct sunshine or strong light the camera.
⊘	Avoid touching the camera lens with finger.

2. Features

High Magnification Zoom Lens

High 230 x zoom function. (x 23 Optical zoom, x 10 Digital zoom) : DAZ-523
High 300 x zoom function. (x 30 Optical zoom, x 10 Digital zoom): DAZ-530

High resolution 520TVL

Color : more than 520TVL, B/W : more than 570 TVL.

SSNR Function

Low illumination noise has been significantly reduced and resulting in a clear and sharp image display in the dark.

Low illumination, Day Night

The camera automatically determines whether it is night time or day time, selecting operating mode automatically.
Change B/W mode (0.1Lux) building in ICR DAY & NIGHT in the dark.

DIS Function

Compensate for vibration of camera under the shaking condition.

Motion detection

Once motion is detected, the camera sends an alert signal to

the processing unit without separate sensor (Output MD of External signal)

Miscellaneous Functions

Preset, Privacy Zone Masking, Digital zoom. Image Pause, Mirror Effect, Up Down reversion etc.

Control via OSD menu and RS-485

The OSD menu and RS-485 pins allow for remote control for the camera, the user can control the lens using external control connection.

Multi Protocol

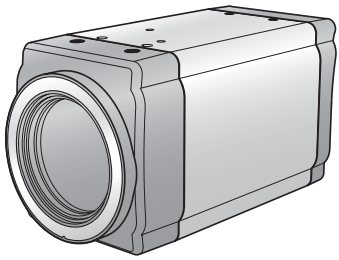
Various Protocol available by using Multi Protocol function.

Remote reception (option.)

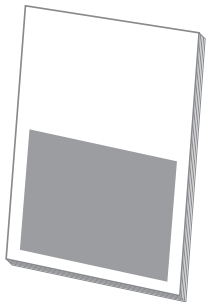
Effective control by using Remote Controller.

3. Products Components

1. Color zoom camera (DAZ-530 / DAZ-523)

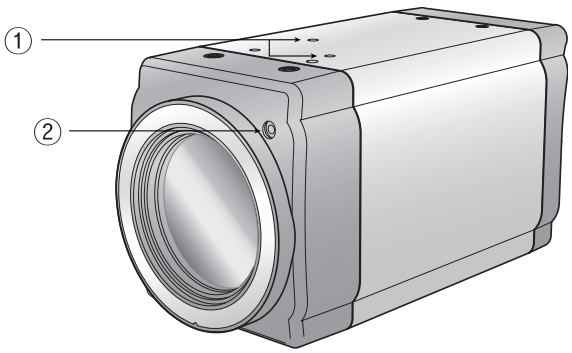


2. Instruction Manual



4. Name and Functions of Each Parts

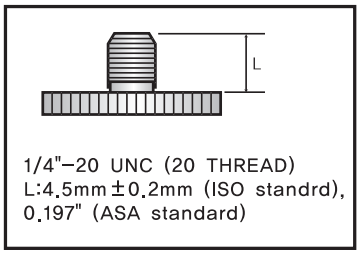
1) Front



1. Tripod Mounting Bracket Screw Hole

Used to fix tripod mounting bracket on top of the camera.

Tripod mounting is attached on bottom of the camera but it can install the mounting in the top of camera when the user need.

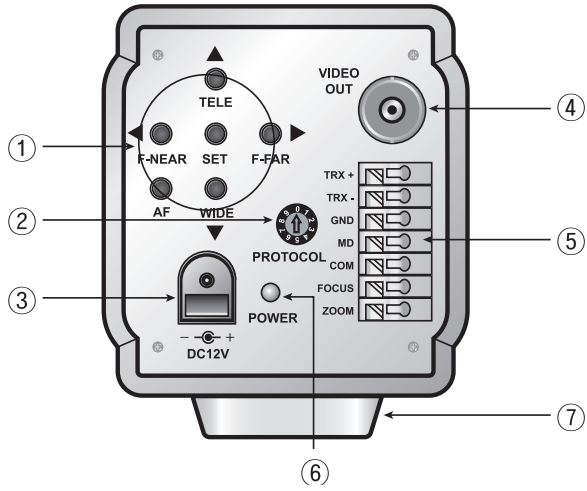


The measurement of suitable screw for the holes

2. Remote receive

Zoom and focus functions can be controlled by using external controllers (Optional : Remote controller)

2) BACK



① Key Buttons

- UP (TELE button) : To move the arrow indicator to up
  - To close in on a far object. (ZOOM IN)
- DOWN (WIDE button) : To move the arrow indicator to down
  - To widen the view. (ZOOM OUT)
- SET: To access the main setup menu.
- LEFT (F-NEAR button): To move the arrow indicator to left
  - To see a near object clearly
- RIGHT (F-FAR button) : To move the arrow indicator to right
  - To see a far object clearly
- AF button : To activate auto focus just once

② Protocol Select Switch

- Set Protocol as the allow direction.

③ Power Input Terminal

- Power supply terminal (DC12V±10%).

☞ Notes

- If the Adaptor Power Line is extended improperly, it may cause malfunctions since the camera is affected by unstable voltage condition.
- Ensure Power Supply Source: DC 12V ± 10%, 500mmA
- The wire is polarized. Match "+" and "-" terminals properly

④ Video Output Jack

- Used to connect an external video monitor in jack.

⑤ External Control Connector

- Zoom and focus functions can be controlled by using external signal, RS-485 communication.

⑥ Power LED

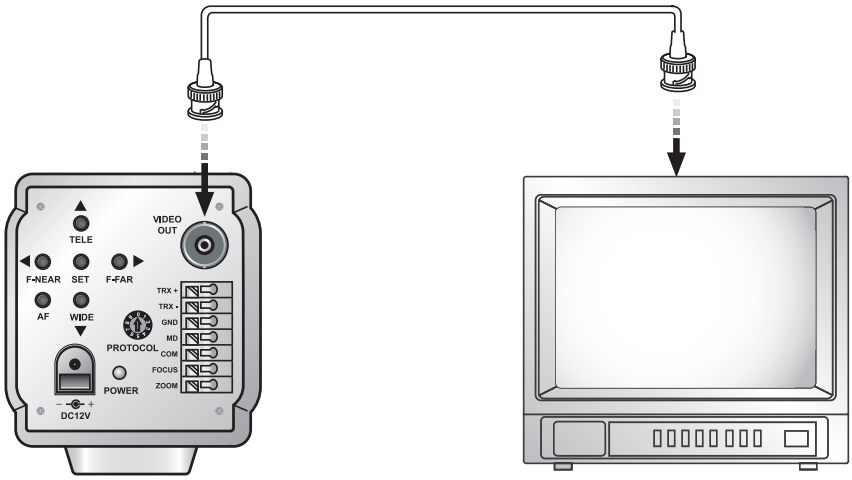
- Illuminates when power is supplied.

⑦ Tripod Mount Pole

- Used to install the camera on an optional Tripod or Bracket.

5. Connection

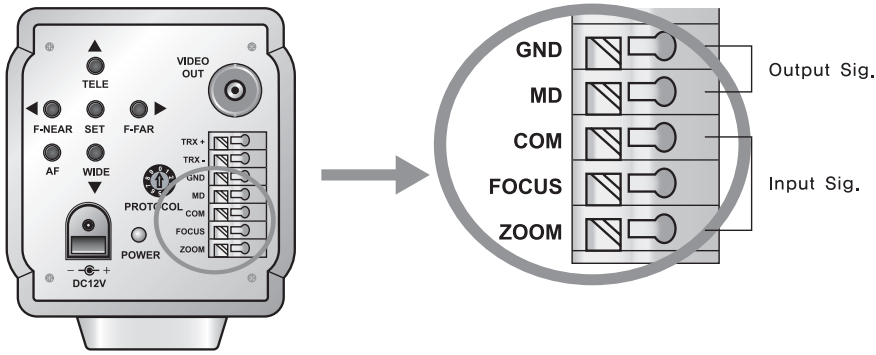
1) Connecting to Monitor



Connect Video Out Jack to the monitor's Video In jack as shown below.
(Connect cables with the unit powered down.)

2) Connecting to connection

• External Control Connector

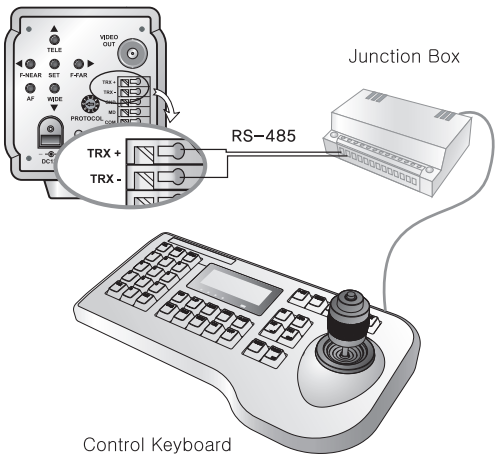


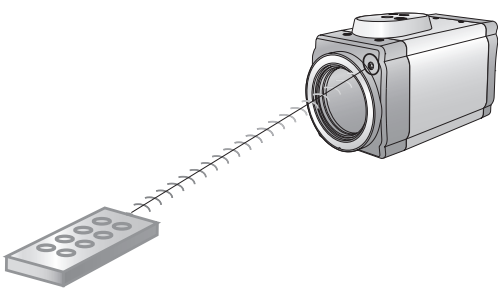
Focus and Zoom functions can be controlled by using external signals.
(※ It can be broken by using Overvoltage.)

Connector	Function	Signal Level	I/O
ZOOM	Tele	+6V~+12V COM	I
	Wide	COM -6V~-12V	
FOCUS	Far	+6V~+12V COM	I
	Near	COM -6V~-12V	
COM		COM	—
MD		+4.0V~+5.0V There is motion 0V There is no motion 5±0.5sec	O

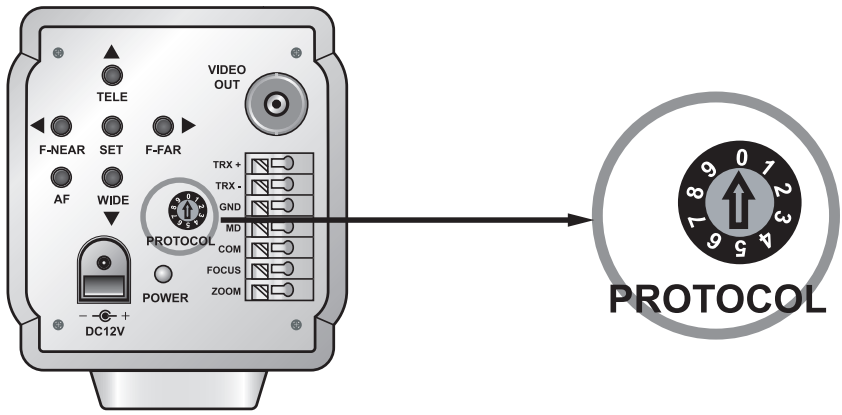
※ MD (Motion Detection) Output Signal Level (less than 10mA)

• Communication Control Connector





• Protocol setting



Select the protocol to move the arrow indicator below

No.	Protoco	No.	Protocol
0	D-max (9600 bps)	4	P-D (9600 bps)
1	P-P (9600 bps)	5	P-D (4800 bps)
2	P-P (4800 bps)	6	P-D (2400 bps)
3	P-P (2400 bps)	7	S-T (9600 bps)

(Factory default is D-max protocol communication)

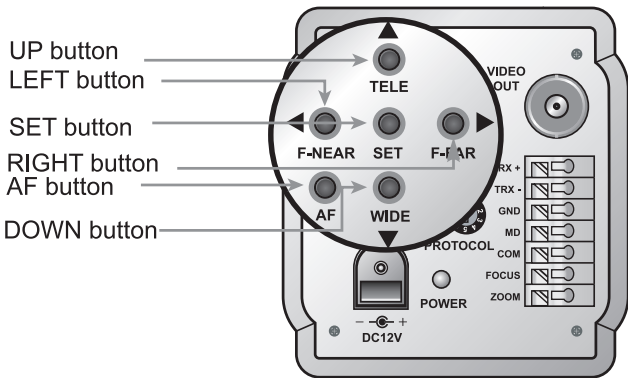
6. Operation Your Camera

1) Menu Configuration

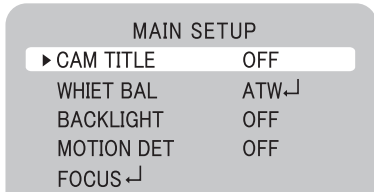
MAIN SETUP MENU			
CAM TITLE	• OFF • ON		
WHITE BALANCE	• ATW	• AWC→SET	• MANUAL
BACKLIGHT	• OFF • HIGH	• LOW	• MIDDLE
MOTION DET	• OFF • ZOOM TRK • DISP ZOOM MAG • LENS INIT	• ON FOCUS • ZOOM SPEED • ZOOM POS INIT • END	• MODE • D-ZOOM
EXPOSURE	• BRIGHTNESS • AGC • END	• IRIS • SSNR	• SHUTTER • SENS-UP
SPECIAL	• USER PRESET • SYNC • END	• PRIVACY • COMM ADJ	• DAY&NIGHT • IMAGE ADJ
RESET			
EXIT			

2) Menu Setup

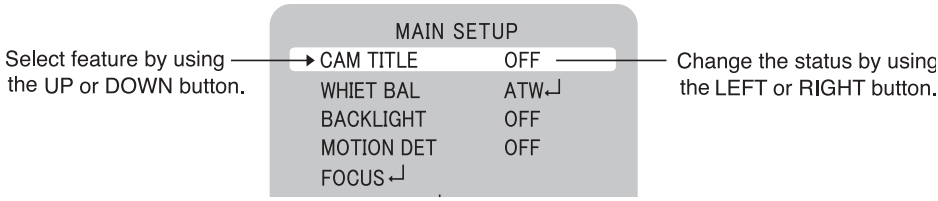
Use the six buttons on back of the camera.



1. Press the SET button to access the main setup mode.
   • Main setup menu is displayed on the monitor screen.



2. Select the desired feature by using the UP or DOWN button.


Select feature by using the UP or DOWN button.
MAIN SETUP
CAM TITLE OFF
WHIET BAL ATW↵
BACKLIGHT OFF
MOTION DET OFF
FOCUS ↵
Change the status by using the LEFT or RIGHT button.

3. Change the status of the selected feature by using the LEFT or RIGHT button.
4. When completed, move the arrow indicator to 'EXIT' and press the SET button.

☞ Notes

- Features marked with a '↵' have an accessible submenu.
- Some features marked with a '----' are not available according to the status of setting option.

CAM TITLE

Use this feature to designate a name for the camera, which will display on the monitor screen.

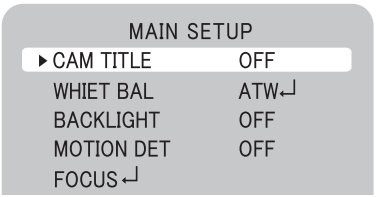
1. Press the SET button to display the main setup menu and move the arrow indicator to 'CAM TITLE' by using the UP or DOWN button.

2. Set ‘CAM TITLE’ to 'ON' by using the LEFT or RIGHT button.

☞ Notes

• If the CAM TITLE feature is set to 'OFF', the name will not displayed in the monitor.

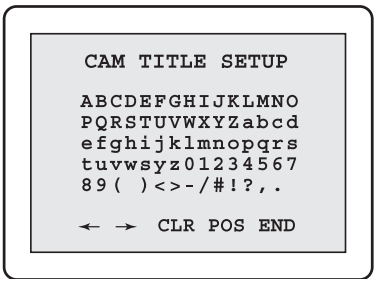
3. Press SET button.



4. You can enter up to 20 characters.

① Move the cursor to the character entry field by using the LEFT or RIGHT button.

② Use UP, DOWN, LEFT, and RIGHT buttons to select a desired character.



③ Press the SET button to confirm selection of the blinking character. The character is then saved, and the cursor in the entry field moves to thenext position.

④ Repeat steps ① through until the desired name has been entered.

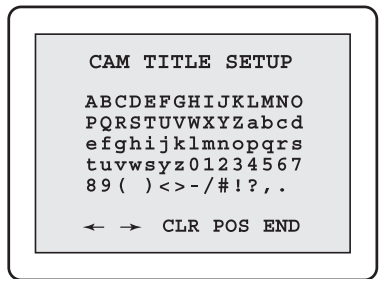
☞ Notes

• Correcting Mistakes

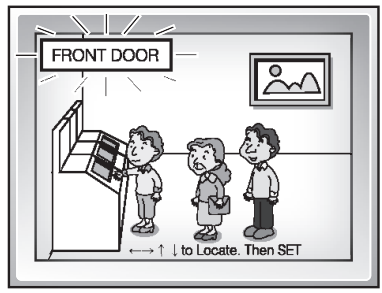
- Move the cursor to 'CLR' and press the SET button to clear the entire entry. To modify one character, use '↵ or '↵ to position the cursor above the characterto be modified and click the SET button after selecting the character to enter.

5. Select on screen position of the CAM TITLE.

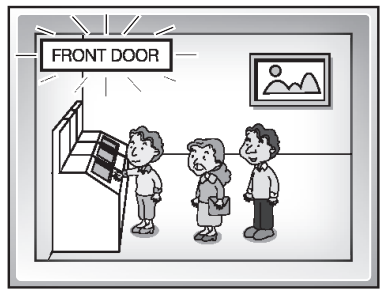
① Move the cursor to 'POS' and press SET button.



② The CAM TITLE is displayed on the top-left of the monitor screen. (Default position)



③ Select the position by using the 4-directional buttons, then press the SET button to confirm the position.



6. When completed, move the cursor to 'END' and press SET button.

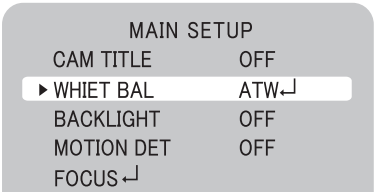
WHITE BAL

Your camera provides three 'WHITE BAL' control modes for your choosing in adjusting the white balance.

1. Press the SET button to access the main setup menu and move the indicator to 'WHITE BAL' using the UP or

DOWN button.

2. Set 'WHITE BAL' using the LEFT or RIGHT button.



※ The three white balance control modes are as follows.

- **ATW(Auto Tracking White Balance)** : OUTDOOR: This mode can be used within the color temperature range 1800~10500°K
  (Ex: fluorescent light, outdoor, sodium vapor lamp or inside tunnels)
  INDOOR : This mode can be used within the color temperature range 3000K~10500°K.
- **AWC(Auto White balance Control)** : The white balance is automatically adjusted in a specific environment. In order to obtain the best result, press the SET button while the camera focuses on white paper. If the environment including the light source is changed, you have to adjust the white balance again.
- **Manual** : To fine adjust, select the Manual mode. You can increase or decrease the red or blue factor while monitoring the difference on the screen. Set to 'MANUAL' mode and press the SET button. Increase or decrease the value for red(R-Gain) and blue(B-Gain),

watching the color of the picture, and press the SET button when you obtain the best color.

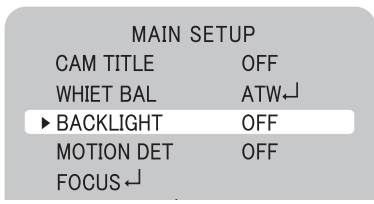
☞ Notes

- Proper White Balance may not be obtained under the following conditions.
  ① When the scene contains mostly high color temperature object, such as a blue sky or sunset.
  ② When the scene is dim.
  ③ If your camera directly faces a fluorescent lamp or is used in an environment of varying lighting conditions.

BACKLIGHT

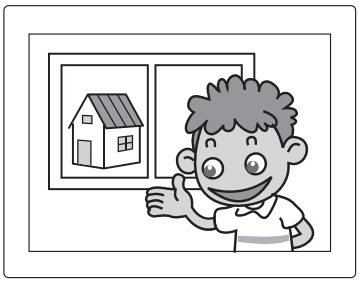
When there is a strong backlight behind the object, clear images of the backgroundas well as the object can still be obtained by using the BACKLIGHTfunction.

1. Please position the arrow to point to 'BACKLIGHT' on the SETUP menu by using the UP and DOWN buttons.
2. Please select the mode you wish to operate by pressing the LEFT or RIGHT button.

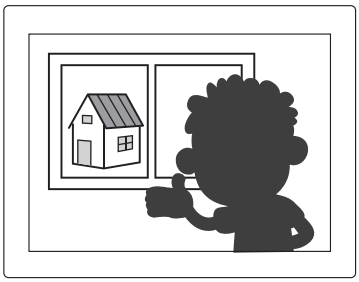


▶ HIGH/MIDDLE/LOW: You can adjust the sensitivity of Backlight Compensation.

▶ OFF : BACKLIGHT function does not operate.



BACKLIGHT ON

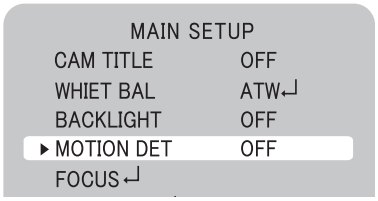


BACKLIGHT OFF

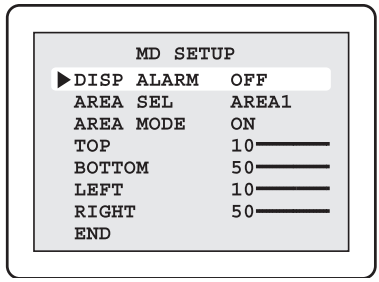
MOTION DET

This product has a feature that allows you to observe movements of objects in 4 different areas on the screen, and the words 'MOTION DETECTED' appear on the screen when movement is detected; hence a single individual can conduct supervision efficiently. The camera detects an object's movement by sensing disparity of outline, and level of brightness and color. The camera receives detection signal from MD output terminal.

1. Please position the arrow to point to 'MOTION DET' on the SETUP menu. Using the UP and DOWN buttons.
2. Please select the mode you wish to operate by pressing the LEFT or RIGHT button.



① Please press the SETUP button.



- OFF : MOTION DETECTION mode is cancelled.
- ON : Any motion in the selected areas is observed.

▶ DISP ALARM : Appear the word "MOTION DETECTED" when the subject moves.

▶ AREA SEL : Select the area user wants to observe in the 4 areas

▶ AREA MODE : Select to appear the word "MOTION DETECTED" on the screen.

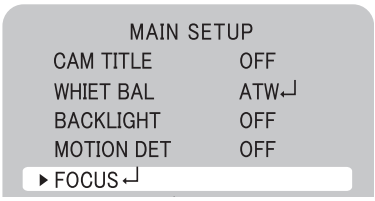
▶ TOP, BOTTOM, LEFT, RIGHT : Adjust the size of area to be observed by using button.

☞ Notes

Tips on Using the Motion Detection Feature

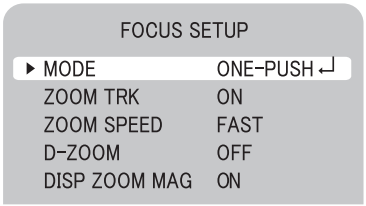
- The feature may not function properly under flickering light conditions.
- The camera interprets sudden changes in lighting and subsequent change in brightness of an object as motion.
- With the feature enabled, other algorithms may require additional time to operatethan usual.
- This system does not guarantee prevention of fire or theft. The manufacturer shall not be held responsible for any accident or damage incurred.
- Connect an external alarm device to MD Out on back of the camera.
- Be careful of that MD Out can be appeared according to the moving of zoom.

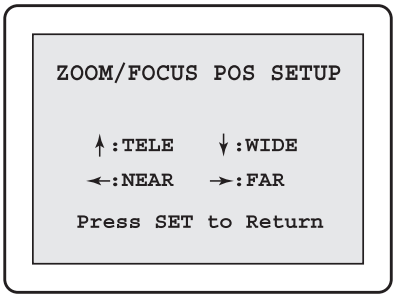
FOCUS

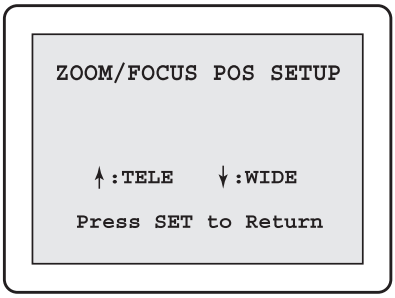


1. Press the SET button to access the main setup manu and then position the indicator over FOCUS using the UP or DOWN button.
2. Press the SET button.

▶ MODE : You can select the most suitable zoom mode. Move the arrow indicator to 'MODE' by using UP or DOWN button. Digital zoom is operated after optical zoom (x23, x30) is finished.







• ONE PUSH :

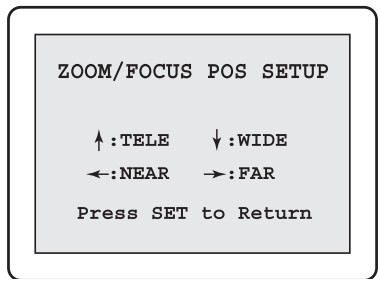
Focus is automatically adjusted just once, after zoom position is changed. Select 'ONE PUSH' and press the SET button to confirm. Increase or decrease optical zoom (ZOOM) or digital zoom (D-ZOOM) positions by using the directional buttons while verifying the changes on screen. Press the SET button once desired image quality is obtained.

• AUTO :

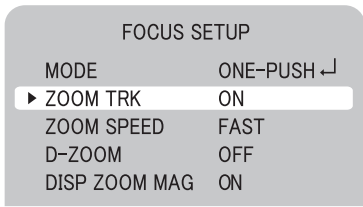
Select AUTO and press the SET button to confirm. Increase or decrease optical zoom (ZOOM) or digital zoom (D-ZOOM) positions by using the UP or DOWN button while verifying the changes on screen. Enabling D-ZOOM (ON) means that digital zoom will activate once optical zoom ends. Focus is automatically adjusted with moving zoom.

• MANUAL :

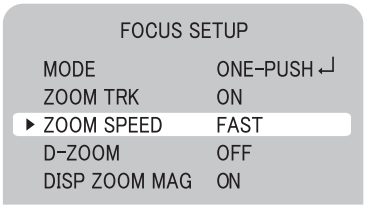
Select 'MANUAL' and press the SET button to confirm. Increase or decrease optical zoom (ZOOM) or digital zoom (D-ZOOM) positions by using the directional buttons while verifying the changes on screen. Press the SET button once desired image quality is obtained. Focus can be manually adjusted, independent of moving zoom.



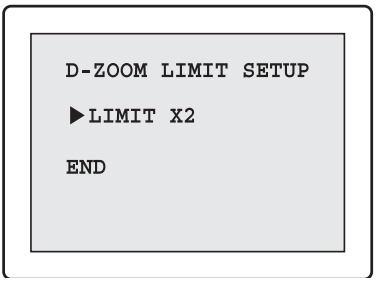
▶ ZOOM TRK: Select 'ON' by using LEFT or RIGHT button in ZOOM TRK menu. Press SET button then, Focus function will be run in operation of zoom.

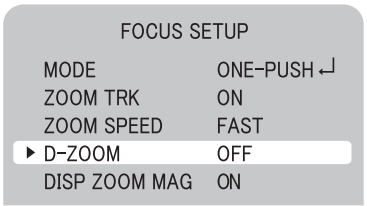


▶ ZOOM SPEED : Configure zoom tracing speed by using this feature. Position the indicator over 'ZOOM SPEED' by using the UP or DOWN button and then set todesired mode by using the LEFT or RIGHT button.

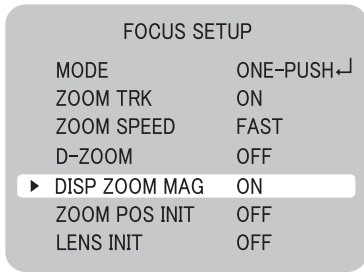


▶ D-ZOOM : Configure magnification limit from x2~x10 using this feature. Position the indicator over 'D-ZOOM' by using the UP or DOWN button. Set 'D-ZOOM' to 'ON' and press the SET button to confirm.

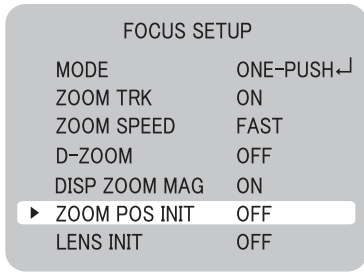




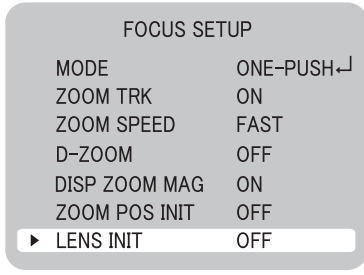
▶ DISP ZOOM MAG : Use this feature to display the current zoom magnification level on screen. Position the indicator over 'DISP ZOOM MAG' by using the UP or DOWN button. Then set to ON by using the LEFT or RIGHT button.



▶ ZOOM POS INIT : Moves to the controlled ZOOM position when the power truned on and is a function of the initial ZOOM position control.



▶ LENS INIT : Use this feature to initialize the lens. Position the indicator over LENS INIT. By using the UP or DOWN button. Press the SET button to confirm.



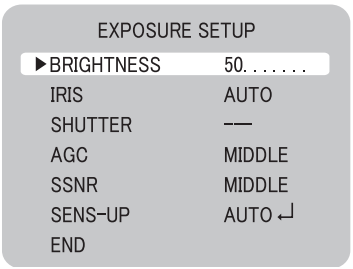
☞ Notes

- Use this feature to initialize the lens regularly, it is helpful to focus movement properly.

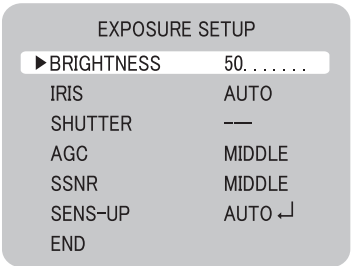
▶ END : To revert to the main setup menu.

EXPOSURE

1. Press the SET button to access the main setup menu and then position the indicator over 'EXPOSURE' by using the UP or DOWN button.
2. Press the SET button to confirm.

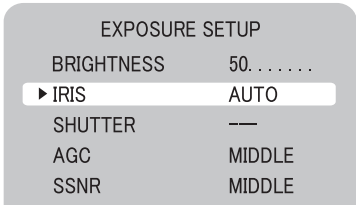


▶ BRIGHTNESS : Use this feature to adjust image brightness. Position the indicator over 'BRIGHTNESS' using the UP or DOWN button. Then increase or decrease brightness level by using the LEFT or RIGHT button while verifying the changes on screen. Set END once desired level is obtained.

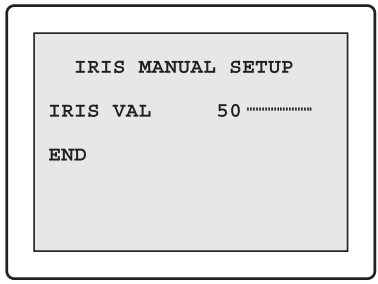


▶ IRIS : Set 'IRIS' to 'AUTO' or 'MANUAL'. Position the indicator over 'IRIS' by using the UP or DOWN button and

then select the desired iris mode using the LEFT or RIGHT button.

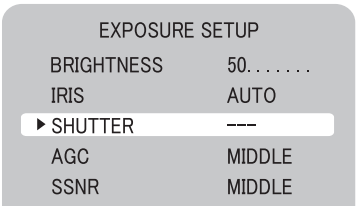


- AUTO : The iris is automatically activated upon illumination.
- MANUAL : Manual iris configuration. Set 'IRIS' to 'MANUAL' by using the LEFT or RIGHT button and then press the SET button. Increase or decrease iris level by using the LEFT or RIGHT button while verifying the changes on screen.



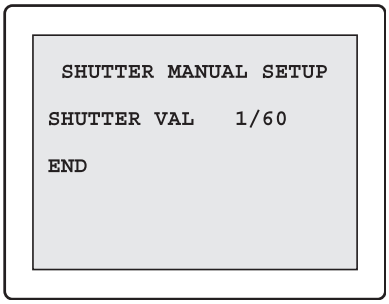
▶ SHUTTER : Control image brightness by adjusting shutter speed.

1. Position the indicator over 'SHUTTER' by using the UP or DOWN button. Then select the desired shutter mode (A.FLK, ESC, MANUAL) using the LEFT or RIGHT button.



- A.FLK : (NTSC: 1/100, PAL: 1/120):Flicker-free mode.
- ESC : Automatic shutter speed setting (optimal).
- MANUAL : Manual shutter speed setting.

2. If you choose 'MANUAL', select the optimal shutter speed.
   - In MANUAL mode, the optimal shutter speed needs to be designated. Select from 1/60 to 1/120,000 (NTSC) or from 1/50 to 1/120,000 (PAL).



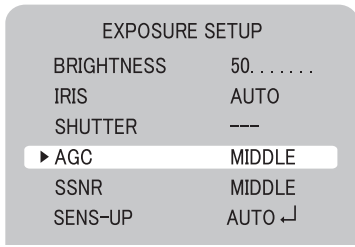
   ※ 'Sens-Up' mode can be configured manually (2x to 128x).
   - Verify changes made to the shutter speed by referencing to changes in on screen brightness.
3. Press the SET button to complete.

☞ Notes

- Image may become unstable if the camera is set to 'ESC' mode and faces a strong fluorescent light.
- Under 'ESC' mode, the brightness can be adjusted using the LEFT or RIGHT button.
- The WDR feature is not available under MANUAL mode.
- Sens-up is disabled under 'MANUAL' or 'A.FLK' mode.

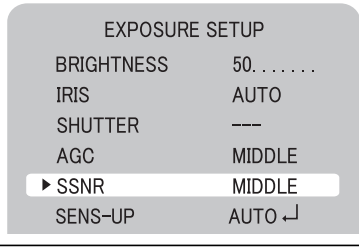
▶ AGC (Auto Gain Control) : For brighter images.

1. Position the indicator over 'AGC' by using the UP or DOWN button.
2. Set 'AGC' to the desired mode by using the LEFT or RIGHT button.
   - HIGH: Wide range gain value adjustment
   - MIDDLE: Middle range gain value adjustment
   - LOW: Narrow range gain value adjustment
   - OFF: Disabled



▶ SSNR (Samsung Super Noise Reduction) :

1. Position the indicator over 'SSNR' by using the UP or DOWN button.
2. Set 'SSNR' to the desired mode by using the LEFT or RIGHT button
   - OFF : Disabled.
   - LOW : Low noise reduction.
   - MIDDLE : Medium noise reduction.
   - HIGH : High noise reduction.

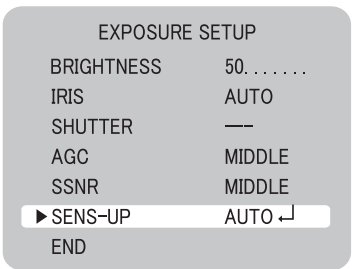


☞ Notes

- Changing 'AGC' setting from LOW to HIGH results in greater sensitivity, as well as on screen noise.
- USSNR function is disabled in AGC mode 'OFF'.

▶ Sens-UP: This feature ensures clear images at night or under low lighting conditions.

1. Position the indicator over 'SENS-UP' using the UP or DOWN button.
2. Set 'SENS-UP' to the desired mode using the LEFT or RIGHT button.
3. Select SET button is AUTO mode then, SENS-UP limit can be adjusted from x2~ x128.



- AUTO: Select this mode for use in night time or under low lighting conditions.
- OFF: Disabled

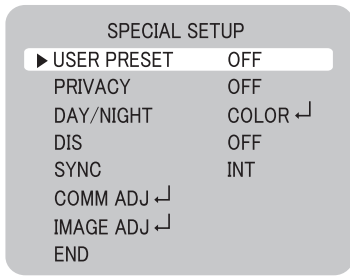
☞ Notes

- SENS-UP doesn't work when AGC mode off.
- SENS-UP doesn't work when SHUTTER is Manual
- Enabling Zoom magnification increase, the image is brighter but it may result image ghost of moving subject and Auto focus properly.

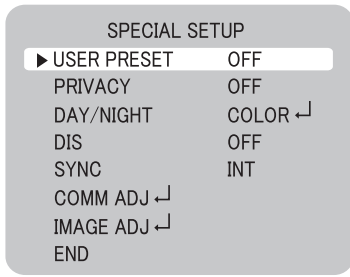
▶ END : ave the exist setting and move the Main Setup Menu.

SPECIAL

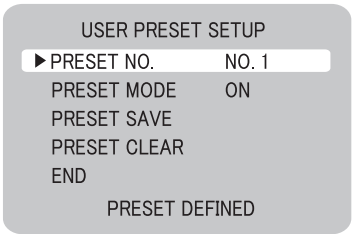
1. Press the SET button to access the main setup menu and then position the indicator over 'SPECIAL' using the UP or DOWN button.
2. Press the SET button to confirm.



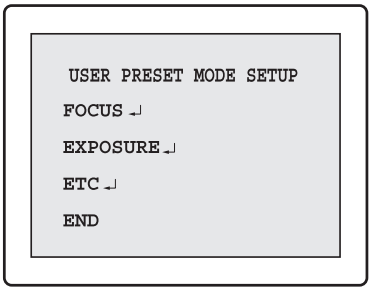
▶ USER PRESET : Preset user-designated configurations using this feature. Position the indicator over 'USER PRESET' using the UP or DOWN button and then set to 'ON' by using the LEFT or RIGHT button. Press the SET button to confirm.



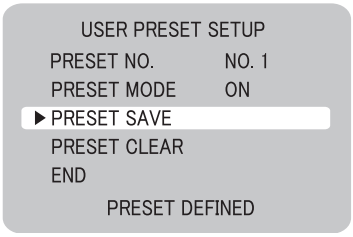
- PRESET NO: Up to eight different preset configurations are supported.



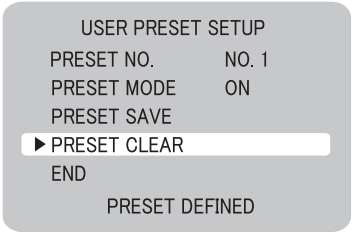
- PRESET MODE : Configure initial settings under FOCUS, EXPOSURE, etc.



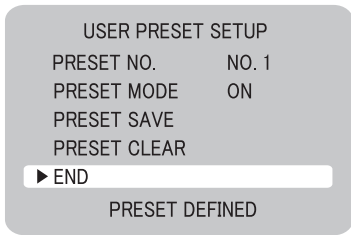
- PRESET SAVE : Save configured preset.



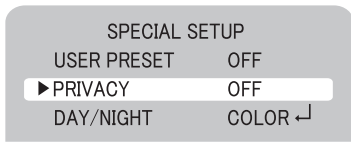
- PRESET CLEAR : Clear configured preset.



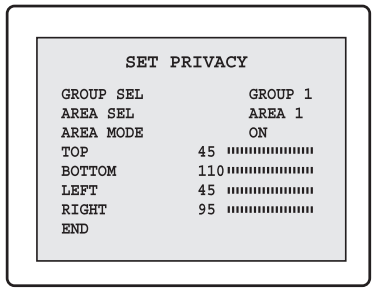
• END : Revert to the SPECIAL SETUP menu.



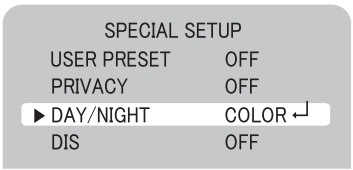
▶ PRIVACY: Mask privacy area by using this feature. The mask area expand/contract upon the zoom position.



- GROUP SEL : Choose up to eight groups. Each group has been can consisted of four mask areas.
- MASK COLOR : Adjust desired mask color level.
- AREA SEL : Configure eight mask areas.
- AREA MODE : Mask area display.
- TOP : To move the mask area up.
- BOTTOM : To move the mask area down.
- LEFT : To move the mask area left.
- RIGHT : To move the mask area right.



▶ DAY & NIGHT : Select from COLOR, BW or AUTO modes.

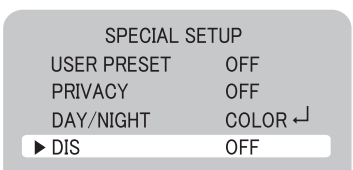


- COLOR: Color mode.
- B/W: BW mode.
- AUTO: The camera automatically detects lighting conditions and selects the mode accordingly.

☞ Notes

- When "AGC" is set to "OFF", AUTO MODE cannot be used but, only use "COLOR MODE" and "B/W MODE".
- When Use B/W mode under Sunlight or Halogen Lamp, the focus may be smear than normal light.

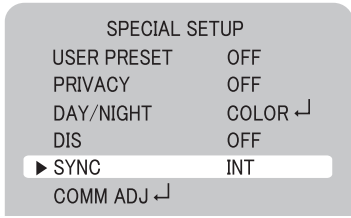
▶ DIS : The DIS mode can compensate for vibration of the camera.



☞ Notes

- When DIS is operating, D-ZOOM does not operate.

▶ SYNC : Apply INIT mode.

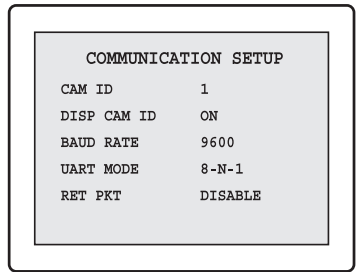


• INIT : Internal synchronization

▶ COMM ADJ : Use this feature to select communication protocol. Position the indicator over 'COMMUNICATION' by using the UP or DOWN button.

☞ Notes

• Be careful of that It can be run by the CAM ID value when using RS-485 communication and the RS-485 can have a problem if DISP CAM ID is OFF because user can not memorize the ID.



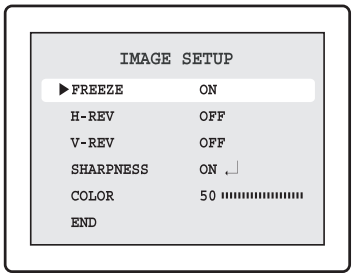
- CAM ID : Assign an ID number to the camera (1 to 255). Identification number zero is used for Remote controller setup.
- DISP CAM ID : Displays camera ID on top left corner of the screen.
- BAUD RATE : Configure baud rate from 2400/4800/9600/19200/38400/57600 bps.
- UART MODE : Configure parity bit to NON, EVEN, or ODD. Data bit is set to 8bit, and stop bit to 1bit. Set the UART MODE to EVEN if using the Remote Controller.

• PET PKT : Used to transfer a packet.

☞ Notes

- Be careful of using of RS-485 in COMM ADJ mode.
- BAUD RATE, UART MODE can be only operated in the default mode(9600bps, 8-N-1) in RS-485 communication.

▶ IMAGE ADJ : Includes image quality or special function factors.



- FREEZE : Use this feature to freeze capture an image.
- H-REV : Use this feature to horizontally inverse the screen.
- V-REV : Use this feature to vertically inverse the screen.
- SHARPNESS : Increasing this value sharpens object edges. Too high of a setting, however, produces noise and may obscure the image.
- COLOR : Adjusting this value affects the chroma level only; the burst level is unaffected.

▶ END : evert back to the USER PRESET menu.

RESET

To reset your camera to factory default condition.

☞ Notes

- Some in 'COMM ADJ' mode can not be reverted even if it is RESET.

EXIT

To finish setup menu.

7. Troubleshooting

Problem	Solution
No display	• Check the power cable and the wiring between the camera and the monitor. • Ensure proper video cable connection (Video Out Jack).
Dim display	• The lens could be dirty. Clean with a soft, clean piece of cloth. • Adjust monitor settings. • Adjust camera position if exposed to a strong light source.
Dark display	• Adjust the monitor's contrast level. • Set the intermediate device, if in use, to 75Ω / Hi-z
The camera is not functioning properly and its surface is hot.	• Check the power source for compliance with specifications
Auto mode of DAY/NIGHT is not selected or not active.	• Ensure DAY/NIGHT mode, the mode set to "AUTO" • Ensure AGC mode is set to "ON"
Motion Detection feature is not active.	• Ensure that the feature is set to ON
Improper color Uneven colors Flickering	• Check the "WHITE BAL" mode, the setting is properly. • Adjust and configure WHITE BAL • The camera may be facing the sun or a fluorescent light. Adjust the position of the camera.
SENS-UP feature is not active.	• Ensure AGC menu is set to ON. • Ensure SHUTTER MENU is set to MANUAL.

8. Specifications

DAZ-530

Signal system	NTSC	PAL
Image Sensor	1/4" Sony super HAD CCD	
Total Pixels	811(H)X508(V)	795(H)X596(V)
Effective Pixels	768(H)X494(V)	752(H)X582(V)
Resolution	Color : 520TV Lines(Min), B/W : 570TV Lines(Min)	
Scanning Frequency	15.734KHz(H), 60(V)	15.625KHz(H), 50(V)
Scanning System	2:1 Interlace 525 Lines/60Fields/30Frames	2:1 Interlace 625 Lines/50Fields/25Frames
Shutter Speed	1/60~1/120,000 sec	1/50~1/120,000 sec
Min. Illumination	0.7Lux @F1.6 (Normal Color Mode) 0.1Lux @F1.6 (B/W Mode) 0.0007Lux @F1.6 (Sens-up Mode)	
Zoom Rate	30X, f 3.3~99mm (F1.6~3.4)	
Min. Focus Distance	1m	
Angle Field of view	H : 58.0°(Wide)~2.22°(Tele), V:44.8°(Wide)~1.68°(Tele)	
Back Light	Low / Middle / High / Off	
Day & Night	AUTO / COLOR / B/W	
Privacy Zone	On / Off (32 Zones, 8 Group/4 Programmable Zone per Screen)	
AGC	Low / Middle / High / Off	
Camera ID	On (255 ID Selectable) / Off	
White Balance	ATW / Outdoor / AWC / Manual	
SSNR	LOW / MIDDLE / HIGH / OFF	
OSD	Built-in	
Flip / Mirror	On / Off	
Communication	RS-485, Multi Protocol (Pelco, D-max)	
S/N Ratio	More than 50dB	
Video Output	Composite video output 75 ohm terminated	
Sync. System	Internal	
Operating Humidity	30% ~ 90% RH	
Operating Temp.	-10℃ to 50℃	
Dimension	60(W) X 64(H) X 119.8(D)mm	
Weight	About 378g	
Power Consumption	Max 5W	
Power Supply	DC 12V (±10%) 500mmA	

DAZ-523

Signal system	NTSC	PAL
Image Sensor	1/4" Sony super HAD CCD	
Total Pixels	811(H)X508(V)	795(H)X596(V)
Effective Pixels	768(H)X494(V)	752(H)X582(V)
Resolution	Color : 520TV Lines(Min), B/W : 570TV Lines(Min)	
Scanning Frequency	15.734KHz(H), 60(V)	15.625KHz(H), 50(V)
Scanning System	2:1 Interlace 525 Lines/60Fields/30Frames	2:1 Interlace 625 Lines/50Fields/25Frames
Shutter Speed	1/60~1/120,000 sec	1/50~1/120,000 sec
Min. Illumination	0.7Lux @F1.6 (Normal Color Mode) 0.1Lux @F1.6 (B/W Mode) 0.0007Lux @F1.6 (Sens-up Mode)	
Zoom Rate	23X, f 3.84~88.4mm (F1.6~3.0)	
Min. Focus Distance	1m	
Angle Field of view	H : 52.2°(Wide)~2.36°(Tele), V:40.25°(Wide)~1.78°(Tele)	
Back Light	Low / Middle / High / Off	
Day & Night	AUTO / COLOR / B/W	
Privacy Zone	On / Off (32 Zones, 8 Group/4 Programmable Zone per Screen)	
AGC	Low / Middle / High / Off	
Camera ID	On (255 ID Selectable) / Off	
White Balance	ATW / Outdoor / AWC / Manual	
SSNR	LOW / MIDDLE / HIGH / OFF	
OSD	Built-in	
Flip / Mirror	On / Off	
Communication	RS-485, Multi Protocol (Pelco, D-max)	
S/N Ratio	More than 50dB	
Video Output	Composite video output 75 ohm terminated	
Sync. System	Internal	
Operating Humidity	30% ~ 90% RH	
Operating Temp.	-10℃ to 50℃	
Dimension	60(W) × 64(H) × 119.8(D)mm	
Weight	About 378g	
Power Consumption	Max 5W	
Power Supply	DC 12V (±10%) 500mA	

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